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ABSTRACT

The report describes a model used to evaluate gifted programs. The model is said to rely on three sources of data: (1) structured narrative observation (the Gifted Class Activities Observation Scale); (2) teacher interviews; and (3) pupil interviews. (Sample forms appended.) The application of theory with this procedure resulted in an evaluation model featuring input (identification process, cognitive student growth, levels of thinking, classroom conditions, and attitude toward program) and such program data sources as student achievement, aptitude test data, principal and supervisor recommendations, outside evaluation, and pupil questionnaires. It is concluded that the model and related instruments provide for a viable, yet not overly burdensome, evaluation. (CL)

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Developing an Evaluation Model for Gifted Programs

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Evaluation of programs for gifted students poses some unique problems and challenges for educators. Traditional evaluation models which rely almost solely on standardized test results are recognized as one of the least valid assessment techniques to use with a group of gifted learners. The problem of regression to the mean, which works so conveniently to the advantage of programs dealing with low achieving students, presents significant measurement problems when dealing with a population of students who can be expected to regress statistically downward. Additionally, conventionally normed tests tend to be unreliable at the extremes of their norms, and it is difficult to show much growth on standardized tests when scores are already at the upper limits of the tests.[1,2]

Most of the standard books on teaching the gifted ignore the problems of evaluation altogether and focus instead on the myriad ways of developing programs for these special learners.[3,4] These diverse programs traditionally suggested for gifted youngsters offer focus on higher level thought processes, completion of unique products, and attitudinal changes, all of which are notoriously resistant to typical evaluation procedures.

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[1]Passow, Harry ed. The Gifted and The Talented: Their Education and Development, 78th Yearbook National Society for The Study of Education, 1979.

[2]Renzulli, Joseph. A Guidebook for Evaluating Programs for The Gifted & Talented. N/SLTI, 1975.

[3]Barbe, Walter B. and Joseph Renzulli ed. Psychology and Education of The Gifted: New York: Irvington Publishers, 1975.

[4]Gallagher, James J. Teaching The Gifted Child. Boston: Allyn & Bacon, Inc., 1975.

Despite the problems that evaluation poses for gifted programs, the need for such data for future planning is indisputable. It is with an eye toward program planning and future program development that the current evaluation model was conceived. In our model we have attempted to combine the need for objective data related to cognitive outcomes with the equally important data related to classroom atmosphere and attitudes. We have looked upon the evaluation model as an evolutionary one which has changed already from its original form. In the sections of this report that follow, we will: 1) describe the model as it was used to evaluate the 1979-80 program; 2) describe the model as it has been refined and modified to evaluate the 1980-81 program; and 3) present the evaluative data from the 1979-80 program.

The 1979-80 Model for Evaluating Gifted Programs

The evaluation model developed for 1979-80 program was intentionally open-ended to allow the evaluators to assess the most useful types of data to collect. Three basic sources of data were used: 1) the structured narrative observation; 2) a teacher interview; and 3) pupil interviews with randomly selected students. Results from all three of these sources are documented in Appendix A.

What follows in this section is a brief description of the evaluation process as it occured for 1979-80. In addition, we briefly document how we used our experiences and data from the 1979-80 evaluation in order to refine and develop the model for 1980-81.

Structured Narrative Observation

For the structured narrative observation, each observer focused on the same categories and wrote comments related to those categories during an on-site visit. The categories were:

1. Focus of the activities
2. Pupil thinking and response levels
3. Teacher questioning
4. Classroom conditions
5. Overall evaluation

After piloting the structured narrative format for the 1979-80 observations, we used the information gained from those experiences and refined the observation categories so that they would yield more quantifiable data. The resulting observation form is the Gifted Class Activities Observation Scale (GCAOS). This form combines the advantages of a narrative observation format with the easy interpretation of a more quantifiable instrument. The

GCAOS is further explained on page 32.

Teacher Interview

The teacher interview used in the 1979-80 model consisted of 4 questions:

1. What do you like best about the program?
2. What would you change about the program?
3. Is teaching in this program professionally rewarding?
4. How do you feel about the curriculum for the gifted class you taught?

The observers recorded comments from teachers which are included in Appendix A. After using the teacher interview format, it was clear that the teachers were a rich source of data regarding the program and could provide additional useful information. Therefore, in the 1980-81 model the teacher interview was retained, and the Teacher Questionnaire was added which will allow teachers to assess classroom conditions, pupil learning, and attitude toward the program. Additionally, the Lesson Evaluation form has been added to the 1980-81 evaluation model. This form encourages teachers to focus on each of the individual program goals for every session; teachers evaluate lesson effectiveness according to how well the objectives were met by the students. Copies of the Teacher Questionnaire and the Lesson Evaluation can be found in Appendix B.

Student Interview

Students were interviewed at random in the Spring of 1980. The student interview questions were:

1. Do you like the program?
2. What do you like about the program?
3. What would you change about the program?

4. How is this program different from your regular class?

5. How do you like the teachers in this program?

Sample comments from the student interviews are found in Appendix A.

After using the student interview format for one year, we decided that not only should it be retained, but student input should be expanded. Therefore, the Student Questionnaire (Appendix B) was developed to be administered to all students. This questionnaire samples student attitude toward the program, teachers, and his or her own learning.

The 1980-81 Model for Evaluating Gifted Programs

In the previous section we have briefly described the 1979-80 evaluation model with its 3 components:

a) structured narrative observation form

b) teacher interviews

c) student interviews

We have also noted how each of these 3 components, used in pilot form in Spring 1980, was further refined for use in 1980-81. We then combined our practical experience with evaluation of gifted programs with a review of the available theoretical literature related to evaluation of gifted programs. The result of this combination of theory and practice is what we believe to be a workable model which addresses the evaluation needs of the gifted program for Carroll County.

The model matches evaluative input with program data sources to provide outcomes which may then be evaluated. The input topics selected were the gifted student identification process, cognitive student growth as a result of the gifted program, levels of thinking, classroom conditions and attitude toward the program.

The data sources were students, program teachers, and program parents. Each cell of the model indicates the outcomes or processes used to evaluate the input data with regard to students, program teachers or program parents. Since parents were not involved in the instructional aspect of this program, only their assessment of pupil cognitive growth and attitude was determined to be useful for a program evaluation.

A Model for Gifted Program Evaluation

Input → / Program Data Sources ↓	Identification Process	Cognitive Student Growth	Levels of Thinking	Classroom Conditions	Attitude Toward Program
Students	1. Student Achievement 2. Aptitude Test data 3. Teacher Obs. Worksheet	Selected (Pre-Post) Tests to evaluate program components	1. Outside evaluator: a. Use of a timed observation scale 2. Pupil interview	1. Outside evaluator: a. Evaluation checklist 2. Pupil questionnaire	1. questionnaire (post) 2. Pupil interview
Program Teachers	1. Principal and Supervisor Recommendations 2. Teacher Interview	1. Lesson rating scale for each session 2. Teacher questionnaire	1. Outside evaluator a. Timed observation 2. Teacher interviews	1. outside evaluator: a. evaluation checklist 2. Teacher questionnaire	1. questionnaire (post) 2. Teacher interview
Parents	X	Questionnaire (Post)	X	X	Questionnaire (Post)

(Input)X(Program Data Sources)= Outcomes to Evaluate

Let's consider use of the Model in an evaluative setting. Input data will be considered with respect to program evaluation. An outside evaluator could easily review the student identification process as shown in the model presented. Data for this identification, from tests and teachers would be readily available. Narrative information on gifted program teacher selection based on recommendations and interview comments is also readily obtainable.

As mentioned earlier, cognitive student growth is a difficult task in gifted program evaluation. Renzulli[2], Stanley[5], and others note that Pre-Post use of norm referenced testing is usually inappropriate for highly able students. What is suggested in this Model is the use of locally developed criterion referenced Pre-Post tests to indicate mastery of those program components that, in fact, can be mastered. For those program aspects not measurable in a typical test setting, creative response instruments are suggested. The pretest aspect here is helpful in determining grouping, pace and actual content topic presentation within the program. Program teachers will determine student growth as it relates to individual lesson success and their own rating of the program utilizing instruments found on pages 34 and 35 in Appendix B. The individual lesson rating scales should prove helpful as a tool for self-evaluation.

Assessment of levels of thinking will be evaluated with regard to student response and teacher questioning. An instrument entitled Gifted Class Activities Observation Scale (GCAOS) was developed based on the Spring 1980 evaluative efforts. This instrument is described and presented on pages 33 of Appendix B of this report. The timed use of this scale should effectively assess the utilization of higher level response and questioning within the

classroom, as well as classroom conditions.

Brief pupil and teacher interviews based on the interview questions used within the mathematics evaluation, complete the levels of thinking input information.

As mentioned earlier, the GCAOS instrument will be utilized to assess classroom conditions. An outside evaluator will conduct this observation as well as the pupil and teacher interviews found in the levels of thinking input area. The pupil questionnaire found on page 39 will be completed at the end of the gifted program to provide student input regarding classroom conditions. The teacher questionnaire mentioned with regard to cognitive student growth also contains items designed to assess classroom conditions.

The final, yet extremely important, input aspect is the attitude toward the program. The pupil and teacher questionnaire mentioned earlier contain items to assess program attitude. The parent questionnaire mentioned with regard to student growth contains items designed to measure parent attitudes toward the gifted program. Additionally, pupil and teacher interview questions relate to program attitude.

The Model for Gifted Program Evaluation presents a variety of related outcomes with which a narrative report reflecting back to data may be developed.

The instruments referred to in this model review are presented for consideration. It is felt that the model and related instruments provide for a viable, yet not overly burdensome, evaluative process.

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[5]Stanley, J.C. "Use of Tests to Discover Talent" Intellectual Talent: Research and Development (ed. by D.P. Keating.) Baltimore, Md.: The Johns Hopkins University Press, 1976, pp.3-22.

APPENDIX A

1980 - 1981 Evaluation

Forms

Documented in this appendix are all forms to be used for the 1980-81 evaluation. Below is a brief summary of the approximate time during the program when each evaluation component will be implemented.

		Page
Pre Assessment		
	Pupil Identification	N/A
	Teacher Identification	N/A
	Criterion Referenced Tests	N/A
Ongoing Assessment		
	Lesson Evaluation	29
	Teacher Interviews	30
	Pupil Interviews	31
	Outside Evaluation (GCAOS)	32
Post Assessment		
	Criterion Referenced Tests	33
by outside evaluator	Teacher Questionnaire	34
by outside evaluator	Parent Questionnaire	36
by outside evaluator	Pupil Questionnaire	39

Lesson Evaluation Session No. _____

Objectives (listed from curriculum guide by number)	Met by fewer than 50% of the students	Met by at least 50% of the students	Met by at least 70% of the students	Met by at least 80% of the students	Met by at least 90% of the students

Comments:

TEACHER INTERVIEW QUESTIONS

1. What do you like best about the program?

2. What would you change about the program?

3. Is teaching this program professionally rewarding?

4. How do you feel about the curriculum for the gifted class you taught?

PUPIL INTERVIEW QUESTIONS

1. Do you like the program?

2. What do you like about the program?

3. What would you change about the program?

4. How is this program different from your regular class?

5. How do you like the teachers in this program?

The GCAOS assesses four major areas related to gifted class environment. The areas of classroom focus, pupil thinking-response, questioning, and classroom concerns are composed of various descriptions which are to be evaluated by direct timed observation, (focus, thinking-response, and questioning), and rating (classroom concerns). The literal, critical and creative levels of thinking, response and questioning are defined as:

literal - activities calling for thought, response or questions ranging from recall or rote knowledge through the Comprehension level as identified by Bloom's Taxonomy.

critical - activities calling for thinking or responding based on use of appropriate methods for an analytical response. This corresponds to Bloom's Application and Analysis levels.

creative - activities which result in responses that are newly generated and may represent standards for judgment. This corresponds to Bloom's Synthesis and Evaluation levels.

The timed observation component of the GCAOS is to be tallied in a ten minute setting and should assess classroom focus, pupil thinking, responding, and teacher questioning.

Gifted Class Activities Observation Scale (GCAOS)

Class _____ Date _____ Time _____

	Classroom Focus	0-10%	10-40%	40-70%	70-100%
	Lecture				
	Discussion				
	Activity				
(Tally)	Pupil Thinking-Response	0-10%	10-40%	40-70%	70-100%
	Literal				
	Critical				
	Creative				
(Tally)	Teacher Questioning	0-10%	10-40%	40-70%	70-100%
	Literal				
	Critical				
	Creative				

(rating)	Classroom Conditions	poor	fair	OK	good	outstanding
	Pupil: a. On Task Behavior					
	b. Interaction					
	c. Involvement in Decision Making					
	d. Enthusiasm					
	Teacher: a. Tolerance for Divergent Responses					
	b. Allowance for humor					
	c. Delivery					
	d. Empathy					
	Classroom: a. Control					
	b. Time Management					
	c. Utilization of Materials					

Evaluator Comments:

Evaluator _____

Teacher Questionnaire

Circle the response which you feel is most appropriate.

1. Circle the number which in your opinion best describes classroom conditions.

a)	teaching/learning atmosphere	closed 1	2	3	4	open 5
b)	teaching/learning atmosphere	tense 1	2	3	4	relaxed 5
c)	pupil input	limited 1	2	3	4	extensive 5
d)	pupil/pupil interaction	limited 1	2	3	4	extensive 5
e)	degree of teacher control	limited 1	2	3	4	extensive 5
f)	amount of pupil on-task behavior	limited 1	2	3	4	extensive 5

2. Circle the number which in your opinion best describes pupil learning in this class.

a)	degree of motivation	limited 1	2	3	4	extensive 5
b)	ability of pupils to work independently	poor 1	2	3	4	excellent 5
c)	ability of pupils to work cooperatively	poor 1	2	3	4	excellent 5
d)	extent to which students accomplished objectives	limited 1	2	3	4	extensive 5

3. Circle the number which best describes your attitude toward the program.

a)	worth of the program for students	limited 1	2	3	4	extensive 5
b)	worth of the program for your professional growth	limited 1	2	3	4	extensive 5
c)	your confidence in working with gifted students	limited 1	2	3	4	extensive 5
d)	your attitude toward teaching in the program	disliked it 1	2	3	4	thoroughly enjoyed it 5
e)	your preparation for teaching in the program	poor 1	2	3	4	excellent 5
f)	overall evaluation of program	poor 1	2	3	4	excellent 5

Gifted Program
Parent Attitude Questionnaire

Directions - Circle the most appropriate response.

1. My child seemed to learn much by his/her involvement in the gifted program.
   a. strongly agree
   b. agree
   c. neutral
   d. disagree
   e. strongly disagree
2. My child usually shared ideas learned in the gifted program with me/us.
   a. strongly agree
   b. agree
   c. neutral
   d. disagree
   e. strongly disagree
3. I would like my child to continue with this program, or a similar one, next year.
   a. strongly agree
   b. agree
   c. neutral
   d. disagree
   e. strongly disagree
4. I felt the gifted program was excellent.
   a. strongly agree
   b. agree
   c. neutral
   d. disagree
   e. strongly disagree

5. The teachers for my child's gifted program were well liked.

   a. strongly agree

   b. agree

   c. neutral

   d. disagree

   e. strongly disagree

6. I felt the gifted program would have been better if held after school.

   a. strongly agree

   b. agree

   c. neutral

   d. disagree

   e. strongly disagree

7. I would not want my child in a gifted program in language arts or mathematics again.

   a. strongly agree

   b. agree

   c. neutral

   d. disagree

   e. strongly disagree

8. Gifted programs should be expanded in Carroll County.

   a. strongly agree

   b. agree

   c. neutral

   d. disagree

   e. strongly disagree

9. The ideas learned in the gifted program were not useful to my child.

   a. strongly agree

   b. agree

   c. neutral

   d. disagree

   e. strongly disagree

10. My child's attitude toward language arts/mathematics has improved as a result of the gifted program.

   a. strongly agree

   b. agree

   c. neutral

   d. disagree

   e. strongly disagree

11. Have you been provided with enough information about the Gifted Program?

   _____ Yes _____ No

12. Have you had an opportunity to discuss your child's progress with the gifted class teachers?

   _____ Yes _____ No

13. Did you feel the gifted program was challenging for your child?

   _____ Yes _____ No

STUDENT QUESTIONNAIRE

Directions: Circle the number that tells best how you feel. For instance, if the question asks "how much did you like the program?" and your choices were:

Hated It				Really enjoyed it
1	2	3	4	5

you might circle #1 if you really hated the program, #5 is you really enjoyed it or #3 if you felt somewhere in between.

1. Would you recommend this class to a friend?

Absolutely Not				Absolutely Yes
1	2	3	4	5

2. How did you spend most of your time working in class?

Alone				With several others
1	2	3	4	5

3. How did you feel about this class?

Boring				Exciting
1	2	3	4	5

Useless				Worthwhile
1	2	3	4	5

4. What kind of person was the teacher?

Unfriendly				Friendly
1	2	3	4	5

Not Helpful				Very Helpful
1	2	3	4	5

Not Interested in me				Very interested in me
1	2	3	4	5

5. How did you feel about your own learning in this class?

Didn't learn much				Learned a lot
1	2	3	4	5

Didn't like it				Liked It A Lot
1	2	3	4	5

6. How much of the time during class were you doing what you were supposed to be doing?

Very Little				Almost All
1	2	3	4	5